Short title: Roulette table device with progressive jackpot

5   The invention relates to a roulette table device with progressive jackpot.

In casinos the addition of a jackpot to a roulette game has an additional attraction for players. The imagination is fired by the possibility of standing a slight chance of winning a very
10   high sum from a progressive jackpot in addition to the chance of winning in the actual roulette game. Whether or not a casino game has a jackpot can be an important factor in determining whether or not players take part in the casino game. Both in the case of gambling machines and in the case of the various live
15   games in casinos, such as roulette, blackjack, poker, etc., it is generally necessary, in addition to placing the traditional bet that is needed to take part in the game, to place an additional or higher bet that makes it possible to participate in the jackpot. Taking part in such a jackpot is therefore
20   optional. In each round of a game the player has to decide whether or not he wants to take part in the jackpot. He will always have to weigh up here whether the additional bet is relatively worthwhile as regards the chance of winning.

The disadvantage in this case is that the roulette table
25   devices with progressive jackpot known until now often require additional actions from the croupier and/or player, with the result that mistakes can be made. In addition, the techniques used until now often require laborious actions, in the case of which mistakes can likewise be made.

30   A roulette table device according to the preamble of claim 1 is known, for example from US-A-5,588,650. This publication discloses an automated roulette table game in which for each individual player position bets can be placed on a jackpot. A player can take part in the jackpot by operating a
35   jackpot bet button and in this way activate an indicator. This activation is possible only if a minimum bet is placed in the roulette game and if there is sufficient player credit for the player position concerned. This player credit can be built up, for example, by inserting cash into a bet slot at the player

position concerned. In order to make it possible to check whether the player has actually placed a bet, each player position is provided with its own automated bet display with push-buttons. After activation of the jackpot bet button, the

5 jackpot is raised by a certain sum that is debited from the player credit.

The disadvantage in the case of this known roulette table game with progressive jackpot is that participation in the jackpot is often forgotten in the heat of the actual roulette

10 game. If it is then found that the player would have won the jackpot had he actually operated the jackpot bet button, this leads to great frustration. On the other hand, it often happens that the separately required bet for the jackpot tends to put players off participation in the jackpot, this despite the fact

15 that the bet for the jackpot is low. The provision of the additional jackpot bet button and all the means going with it for checking or assessing whether all conditions have been met makes the device complex and susceptible to faults. The provision of individual bet displays with push-buttons is

20 necessary in order to be able to check whether participation in the jackpot is permitted, but in practice has proved unattractive to players, who do want to have more interaction with fellow players in the game.

The object of the present invention is at least

25 partially to overcome the abovementioned disadvantages, or to provide a usable alternative. In particular, the object of the invention is to provide an attractive roulette table device with an automated progressive jackpot which is not susceptible to faults, and by means of which a round of a roulette table game

30 can be played purposefully together with participation in the jackpot.

This object is achieved by a roulette table device according to claim 1. In this case a detection area is provided on a gaming table of the device, for detection of a so-called

35 dolly in this detection area. Such a dolly forms a standard part of the game means used by the croupier in a roulette game, and in each round of a game, after the ball has fallen into a compartment on the revolving disc, the croupier places said dolly on the corresponding number on a number layout on the

gaming table. Detection means are also provided in order to detect a movement of the dolly to or from the detection area. The detection means are designed in such a way that on detection of the abovementioned dolly movement during a round of a game

5   they automatically issue an instruction to a jackpot computer unit for a random determination to be made on whether the jackpot can be paid out to one or more of the player positions in the round of the game concerned. The jackpot can then be divided over each of the occupied player positions, but is

10 preferably paid out only to those player positions meeting a certain previously defined precondition, for example only if they have placed a bet on the highest paying odds of the winning number that has come up or have staked a predetermined value. In this way the progressive jackpot is in each case automatically

15 set in motion without the croupier or the players having to perform additional actions for the purpose, or without additional bets having to be placed for participation in the jackpot. In this way the jackpot can be fully integrated in a reliable manner in an interactive live casino roulette game.

20 This will have a great attraction for the average casino visitor. Advantageously, the means for detection of placing of the dolly on the number layout, the essential step of the game to be carried out by the croupier, can quickly and simply be built into existing roulette table devices, in particular also

25 in the case of tables without further electronic means provided.

In a special embodiment the detection means comprise a detection loop, in particular an antenna loop, positioned near the detection area. By making the dolly at least partially of a material that can be detected by said detection loop, or more

30 particularly by providing it with a built-in transponder, any movement of the dolly to or from the detection area can be detected in a simple and reliable manner.

More particularly, the detection means comprise a time switch for determining a certain minimum period of time in which

35 the dolly must be moved to or from the detection area. In this way it can be determined whether there is any question of an actual dolly movement to the number layout. Brief time-outs of the detection means advantageously can then not lead to the issuing of an instruction to the jackpot unit. This also means

that brief movements of the dolly will not be regarded as game moments.

The detection area is advantageously in the form of a home base for the dolly, which is provided at the position of or near the croupier position. This home base is known according to the rules and can, if desired, be clearly indicated on the gaming table, for example by means of a colour section or a border.

Further preferred embodiments are set out in the subclaims.

The invention will be explained in greater detail with reference to the appended drawing, in which:

Fig. 1 shows a very diagrammatic view of a part of a roulette table device according to the invention;

Fig. 2 shows diagrammatically the configuration of the roulette table device with jackpot computer unit and visual display unit; and

Fig. 3 shows diagrammatically the configuration of several interlinked roulette table devices according to the invention.

In Fig. 1 a home base 2 for a dolly is formed on a gaming table 1 of a roulette table device, which home base also marks a detection area for the presence of the dolly. The dolly is shown in cross section in Fig. 2, in which it can also be seen that a transponder 4 is built into the centre of the dolly 3. The transponder 4 in particular issues a unique code. A detection loop 6, in particular an antenna loop, is provided under the home base 2. In the detection area inside the home base 2 the detection loop 6 can read out the unique code from the transponder 4 of the dolly 3. Once the dolly 3 is situated outside the detection area, the detection loop 6 does not read out a code and therefore does not "see" a dolly 3.

At the beginning of each round of a game the dolly 3 is situated in the home base 2. After the winning number has come up in a round of a game, the croupier places the dolly 3 on a corresponding number on a number layout of the gaming table. This makes it immediately clear to the players gathered around the gaming table which number has come up, and whether or not they have won. The dolly 3 stays on the winning number for just the length of time that the croupier needs to collect and pay out chips. The moment at which the dolly 3 is removed again from the number layout and replaced at the home base 2 also marks the

end of the round of a game and the beginning of a new round of a game, in other words the players can again place new bets.

The moment the dolly 3 is moved to the number layout, in other words moves outside the detection area in the home base 2,
5   the system reads no further code from the transponder 4.

As soon as this happens, the detection means of which the detection loop forms part issue an instruction to a jackpot computing unit. In this way the transition from the detection loop receiving or not receiving the unique code from the
10   transponder 4 is the envisaged moment of detection as a result of which the detection means issue an instruction to the jackpot computing unit. The detection means in this case have a sort of inbuilt time delay before issuing the instruction. As a result of this, the system can take time-outs on the detection into
15   account.

The antenna loop 6 is connected to an interface 7 that is also situated under the table. The interface 7 is connected to a computer unit 8 belonging to the table. A visual display unit 9, which is likewise connected to the computer unit 8, is situated
20   on the table. The jackpot data and, if desired, the winning numbers, appear on the visual display unit 9. A calculator is available for the croupier, for calculating payments when a jackpot comes up. The calculator can be integral with the visual display unit as a touch screen calculator. The computer unit 8
25   is linked to a central computer 10. Said central computer 10 can be connected to several tables 1 (see Fig. 3), in which case a large visual display unit 11 is also provided. This gives the possibility of offering one central jackpot that rapidly and progressively builds up to a large sum for several gaming
30   tables.

If the detection means detect that the dolly 3 is situated outside the detection area for a sufficiently long time, the system assumes that a winning number has come up, and that the dolly 3 has been placed by the croupier on the appropriate
35   number on the number layout. The detection means then issue an instruction to the computer unit 8, which in turn communicates with the central computer 10 for a random determination to be made on whether the jackpot can be paid out for that table. The information on whether or not the jackpot has come up appears on

the visual display unit 9. As soon as the dolly 3 returns again to the detection area, this is detected and an instruction is issued by way of the computer unit to display the current jackpot values on the visual display unit 9.

Many variants are possible in addition to the embodiment illustrated. For instance, the detection area with the detection loop can also be provided under the number layout, so that in every round of a game it can be established when the dolly is placed on said number layout. In a further variant separate sets of detection means are provided both under the home base and under the number layout. The detection means under the home base in this case can be designed to emit a signal if the dolly leaves the home base, while the detection means under the number layout can be designed to emit a signal if the dolly moves above or onto the number layout. Only after receiving both signals will the system assume that a dolly movement from the home base to the number layout has taken place. This means that it can be even more reliably detected whether there has been an envisaged dolly movement from the home base to the number layout, and in that case an instruction should be issued automatically to the jackpot computer unit. The detection means can be designed in such a way that on detection of the dolly leaving the home base the first set of detection means provided under said home base then automatically switches off and the second set of detection means provided under the number layout only then automatically switches on. For a dolly movement from the number layout to the home base this switching on and off will take place in reverse order. This means that in each case there is only one of the two sets of detection means active and the chance of faults occurring is reduced.

If detection means are provided under the number layout, said detection means can be provided so that they extend beyond the outside peripheral edge of said number layout. The only important parameter is that they remain outside the home base. The advantage of the oversize is that these detection means in a standard model of a particular size are suitable for a number of formats and/or forms of number layout.

It is further also possible to build a magnetic switch into the dolly, or to provide sensors, in particular infrared sensors

etc. An ON/OFF switch can be built into the detection means, and in particular into the dolly, so that the croupier has the possibility of at least temporarily switching off the functioning of the detection means. Signalling means can further be provided in the dolly, which signalling means emit a signal if the jackpot comes up. Examples are means for emitting a light signal or an audio signal. The dolly must be equipped with a receiver for this purpose.

Reading means can be provided in a known manner for automated reading out of a number compartment on a revolving disc of the gaming table in which a roulette ball has come to rest in a particular round of a game. The reading means can be in the form of, for example, a suitable camera or infrared system set up on or near the revolving disc. In a variant reading means can also be provided under the number layout, which reading means interact with the dolly. This means that as soon as the croupier has placed the dolly on the winning number on the number layout, this number is read out in an automated manner. The number read out can then be passed on for further processing to a display and/or to a control unit. The reading means in the case of this variant can advantageously be fully or partially integral with the detection means according to the invention. The placing of the dolly on the winning number then at the same time causes the automatic issuing of an instruction to the jackpot computer unit and to the reading means for having the winning number read out.

In this way a roulette table device is provided in the case of which each time a croupier carries out a dolly movement a computer unit carries out a draw in order to determine whether a jackpot can be paid out. No additional bet is required to participate in the jackpot. Participation in the roulette game means participation in the jackpot. The jackpot can be built up, for example, by making a certain part of the yield achieved in the past on a certain gaming table available for building up the jackpot. The draw by the computer unit for the jackpot is random, the odds being settable. If the computer unit has designated a table for a possible outpayment of the jackpot, this jackpot will, for example, be paid out only to the player who meets a previously defined precondition, for example someone

who has bet on the full winning number. If nobody has done this, the full sum is left in the progressive jackpot meter. If several players are on the winning number, the sum paid out is divided pro rata according to the level of the bet. The croupier can use the touch screen calculator on the display here. The computer unit can calculate the level of the sums to be paid out and show this on the display. Moreover, the jackpot does not necessarily have to be a sum of money, but can also be a prize in kind.